No. 2314.

IN THE

United States Circuit Court of Appeals

FOR THE NINTH CIRCUIT

OCTOBER TERM, 1913.

PACIFIC PHONOGRAPH CO.,
Appellant,

vs.

SEARCHLIGHT HORN CO.,
Appellee.

ADDENDUM TO BRIEF OF APPELLEE.

JOHN H. MILLER,
WM. K. WHITE,
Counsel for Appellee.

THE JAMES H. BARRY CO

IN THE

United States Circuit Court of Appeals

FOR THE NINTH CIRCUIT.

October Term, 1913.

PACIFIC PHONOGRAPH COMPANY,
Appellant,

vs.

SEARCHLIGHT HORN COMPANY,
Appellee.

No. 2314

ADDENDUM TO BRIEF OF APPELLEE.

Since the argument of this case a decision has been rendered by the Court of Appeals for the Seventh Circuit on substitution of materials as affecting the question of invention, which is so applicable to one feature of the case at bar, that we venture to call the Court's attention to it by this addendum to our former brief.

The decision referred to is *Todelo Computing Scale Co.* vs. *Computing Scale Co.,* 208 Fed., 410, reported December 25, 1913, which came to our notice for the first time on January 2, 1914.

The particular point to which this decision applies in the case at bar is the effect of the French patent of Turpin (R. 379-393) on Nielsen's invention.

In said Turpin patent it is vaguely suggested that a horn might be made of tapering strips of wood and glass, with a pair of opposing strips of metal intermingled therewith, the whole producing a bell-shaped horn, and at the oral argument it was asked by the presiding judge if Nielsen had done anything more than substitute a different material for the materials referred to in the Turpin patent. In other words, the question was whether or not Nielsen had not merely substituted one material for another, without doing anything else, which ordinarily is not the exercise of the inventive faculty, but is such only in exceptional cases. This new case from the seventh circuit furnishes a satisfactory answer.

Before discussing the new case, permit us to advert to the general rule of law on the subject so that we may fully understand the same. In the companion case of *Sherman Clay & Co.* vs. *Searchlight Horn Co.,* No. 2306, beginning at the bottom of page 79 of our brief, the matter of substitution of materials as affecting the question of invention is discussed at length, and we ask that the Court read that portion of said brief in connection with the present case. For convenience we repeat here the substance of the argument used there.

This doctrine of substitution of materials is founded

on the cases of *Hotchkiss* vs. *Greenwood,* 11 How., 246, and *Hicks* vs. *Kelsey,* 18 Wall., 673. In the first of these the patentee had merely substituted clay or porcelain for wood or iron in a doorknob; in the second, iron for wood in a wagon-reach. In neither instance was anything other than strength and durability attained. Thereupon the general doctrine was formulated that the mere substitution of materials in manufacturing an old article, without producing any new result, is not invention. It is best expressed in the second case (p. 673) by Mr. Justice Bradley, as follows:

> "The use of one material instead of another in constructing a known machine is, in most cases, so obviously a matter of mere mechanical judgment, and not of invention, that it cannot be called an invention, *unless some new and useful result, an increase of efficiency, or a decided saving in the operation, be obtained.*"

We have italicised that portion of the quotation material to our case, and paraphrasing the rule, it may be stated as follows:

> "In general, the mere substitution of one material for another in constructing a known machine is not an invention, but where the substitution of material produces some new and useful result, an increase of efficiency or a decided saving in the operation, then invention is present."

In explaining this rule the same learned justice,

when sitting at circuit in the case of *Celluloid Co.* vs. *Fred Crane Chemical Co.,* 36 Fed., 111, points out many instances in which the substitution of one material for another amounts to invention, and in that connection says:

> "So in *Hicks* vs. *Kelsey,* 18 Wall., 670, the court held that the substitution of an iron wagon-reach for a wooden one of the same shape and form was no invention; that the machine remained the same, and the adoption of a stronger material was a mere matter of mechanical judgment, and not of invention. These cases depended on their own circumstances. There is no rule of law that the substitution of one material for another is not patentable."

The case of *Smith* vs. *Goodyear,* 93 U. S., 496, involved this doctrine, wherein the material substituted was hard rubber in place of gutta percha, gold, silver, tin and platinum, and the court there considered the cases of *Hotchkiss* vs. *Greenwood* and *Hicks* vs. *Kelsey,* and disposed of them in the following language:

> "We have, therefore, considered this branch of the case without particular reference to *Hotchkiss* vs. *Greenwood,* 11 How., 248. The patent in that case was for an improvement in making door and other knobs for doors, locks, and furniture, and the improvement consisted in making them of clay or porcelain, in the same manner in which knobs of iron, brass, wood, or glass had been previously made. Neither the clay knob nor the described

method of attaching it to the shank was novel. The improvement, therefore, was nothing more than the substitution of one material for another in constructing an article. The clay or porcelain door-knob had no properties or functions which other door-knobs made of different materials had not. It was cheaper and perhaps more durable; but it could be applied to no new use, and it remedied no defects which existed in other knobs. Hence it was ruled that the alleged improvement was not a patentable invention. The case does decide that employing one known material in place of another is not invention, if the result be only greater cheapness and durability of the product. But this is all. It does *not* decide that no use of one material in lieu of another in the formation of a manufacture can, in any case, amount to invention, or be the subject of a patent. *If such a substitution involves a new mode of construction, or develops new uses and properties of the article formed, it may amount to invention. The substitution may be something more than formal. It may require contrivance, in which case the mode of making it would be patentable; or the result may be the production of an analogous but substantially different manufacture.* This was intimated very clearly in the case of *Hicks* vs. *Kelsey,* 18 Wall., 670, where it was said, 'The use of one material instead of another in constructing a known machine is, in most cases, so obviously a matter of mere mechanical judgment, and not of invention, that it cannot be called an invention, *unless some new and useful result, an increase of efficiency, or a decided saving in the operation, be obtained.' But where there is some such new and useful result, where a machine has acquired new functions and useful properties,* it may be patentable as an invention, though the only change made in

the machine has been supplanting one of its materials by another. This is true of all combinations, whether they be of materials or processes. In *Crane* vs. *Price,* 1 Webst. Pat. Cas., 393, where the whole invention consisted in the substitution of anthracite for bituminous coal in combination with a hot-air blast for smelting iron ore, a patent for it was sustained. The doctrine asserted was that if the result of the substitution was new, a better, or a cheaper article, the introduction of the substituted material into an old process was patentable as an invention. This case has been doubted, but it has not been overruled; and the doubts have arisen from the uncertainty whether any new result was obtained by the use of anthracite. In *Kneass* vs. *Schuylkill Bank,* the use of steel plates instead of copper for engraving was held patentable. So has been the flame of gas instead of the flame of oil to finish cloth. These cases rest on the fact that *a superior product has been the result of the substitution,—a product that has new capabilities and that performs new functions.*" (The italics are ours.)

Along the same lines is the case of *Potts* vs. *Creagor,* 155 U. S., 608, which involved the substitution of iron for glass bars in a rotating cylinder. The court held such substitution to be invention and said:

"Applying this test to the case under consideration, it is manifest that if the change from the glass bars of the Creagor wood exhibit to the steel bars of the Potts cylinder was a mere change of material for the more perfect accomplishment of the same work, it would, within the familiar cases of *Hotchkiss* vs. *Greenwood,* 11 How., 248; *Hicks* vs. *Kelsey,* 18 Wall., 670; *Terhune* vs. *Phillips,*

99 U. S., 593, and *Brown* vs. *District of Columbia,* 130 U. S., 87, not involve invention. But not only did the glass bars prove so brittle in their use for polishing wood that they broke and were discarded after a half an hour's trial, but they would undoubtedly have been wholly worthless for the new use for which the Potts required them. Not only did they discard the glass bars, and substitute others of steel, but they substituted them for a purpose wholly different from that for which they had been employed. Under such circumstances, we have repeatedly held that a change of material was invention. *Smith* vs. *Goodyear Dental Vulcanite Co.,* 93 U. S., 486; *Goodyear Dental Vulcanite Co.* vs. *Davis,* 102 U. S., 222."

In *Perkins* vs. *Lumber Company,* 51 Fed., 291, the substitution of wood for iron in bearing blocks for saw carriages was held patentable.

In *Edison* vs. *Electric Co.,* 52 Fed., 300, the substitution of carbon for platinum in making filaments for electric lights was held patentable.

In the cases of *Geo. Frost Co.* vs. *Cohn,* 119 Fed., 505, and *same plaintiff* vs. *Samstag,* 180 Fed., 739, the substitution of rubber for metal in making a button was held patentable.

In *Hogan* vs. *Westmoreland,* 163 Fed., 289, the substitution of celluloid for metal was held patentable.

In *Protector Co.* vs. *John Pell,* 204 Fed., 458, the substitution of a fibrous material for metal was held patentable.

In *King* vs. *Anderson,* 90 Fed., 500, the substitution

of hydrated lime for powdered marble was held patentable.

In *National Casket Co.* vs. *Stoltz,* 153 Fed., 765, the substitution of transparent gauze for glass was held patentable. This case was afterwards reversed, but not in this point (157 Fed. R., 392).

In *Ajax* vs. *Brady,* 155 Fed., 409, the substitution of one metal for another was held patentable.

And the same ruling was made in *Western Tube Co.* vs. *Rainear,* 156 Fed., 49, affirmed in 159 Fed., 43.

Walker on Patents, Sec. 29, after giving the general rule on the subject, says:

> "Important exceptions have, however, been established to the general rule of the last section. If the substitution of materials involved a new mode of construction, or if it developed new properties and uses of the article made, it may amount to invention. And substitution of materials may constitute invention, where it produces a new mode of operation, or results in a new function, or in the first practical success in the art in which the substitution is made. So also, where the excellence of the material substituted could not be known beforehand, and where practice shows its superiority to consist not only in greater cheapness and greater durability, but also in more efficient action, the substitution of a superior for an inferior material amounts to invention."

From the foregoing citations, the rule, together with its limitations, will be made apparent.

Now permit us to consider the new case of *Toledo Computing Scale Co.* vs. *Computing Scale Co.,* 208

Fed., 410, for the purpose of citing which this addendum to our brief is made. The invention there involved was an indicator-drum for weighing mechanisms (scales), consisting of a spindle or shaft, to which were attached spiders or frames made of thin aluminum covered with paper to produce a cylindrical surface, on which indicating figures were placed. Prior thereto these skeleton frames had been made of heavy metal, iron, brass, etc.; but these prior devices on account of their weight were inefficient and unreliable. The object of the invention was to overcome that defect by providing a device extraordinarily sensitive to weights of small amounts. With the heavy metals of the prior art this sensitiveness was not obtainable, which was due to the fact that the greater the weight the greater must be the force to operate it. To overcome this difficulty the patentee made his drum of thin skeleton frames of aluminum, instead of brass, iron, etc. But this substitution produced a computing scale which overcame the defect of the prior art and proved a great commercial success. In sustaining the patent the Court said:

> "In the prior art were combinations of indicator-drums and weighing mechanisms. But the cause of their failure might lie at any one of many points. It remained for Smith to discover that the most essential thing in reorganizing the old elements was to make the drum so light that its interference with the weighing mechanism would be eliminated. And he embodied that

conception or 'happy thought' in the new means described in the patent and covered by the claims of the first patent in suit. The evidence in this record (and we have considered, though we have not thought it necessary to discuss, the remoter references to the non-automatic art), instead of overcoming, has strongly fortified the presumption of invention.

"Defendant insists, however, that making the drum lighter was merely a matter of degree. Of course, the lessening of weight is a matter of degree; but it is not necessarily merely a matter of degree. If the change converts failure into success, something more than a matter of degree is involved. Unreliable automatic scales, in the practical art, are no scales at all. A reliable automatic scale was a new mechanism, a creation, just as in the aspirin case (*Kuehmsted* vs. *Farbenfabriken of Elberfeld Co.,* 179 Fed., 701, 103 C. C. A., 243) this court held that the reduction of the amount of impurities in a compound theretofore known to chemists, whereby a deleterious substance was converted into a valuable medicine, was not merely a change of degree, but was a change of kind, producing a new article of commerce."

The substitution of aluminum for iron and brass was an invention, because it cured the defect of the prior art and resulted in a machine having new capabilities and properties highly useful to mankind. The substitution converted failure into success.

This citation is directly applicable to the case at bar. The French horn of Turpin was an impracticable and worthless device. It never went into use and

it made absolutely no impression on the art. It was a suggestion to do something which never ripened into success. It was a mere "paper patent," which had no effect on the practical art. If, as said by the Court in the Toledo Scales case, "unreliable automatic scales in the practical art are no scales at all," it is equally true that an impracticable and worthless horn in the practical art is no horn at all. On the other hand, the Nielsen horn not only proved a success and a highly useful device, but it revolutionized the art. It captured the entire market and retained it permanently for years. Under such circumstances the contention that Nielsen's patent is invalid as involving nothing more than a mere substitution of material can not be maintained.

We venture in this connection to refer the Court to its decision in the case of *Kings County Raisin & Fruit Co.* vs. *United States Consolidated Seeded Raisin Company,* 182 Fed., 63. There a prior patent to Crosby had been cited, which involved the same general principle of the Pettit patent, sued on, but which was a mere "paper patent" that never went into use, and was impracticable. The appeal was from a motion granting a preliminary injunction, and this Court said:

> "It is probably unnecessary, on this appeal, to determine just what effect should be given to the Crosby patent as limiting the scope of the Pettit invention. It would seem that it was one of those

unsuccessful and abandoned inventions which are held to have no place in the art to which they relate. In an analogous case, Mr. Justice Brown said:

"'His efforts in that direction must be relegated to the class of unsuccessful and abandoned experiments which, as we have repeatedly held, do not affect the validity of a subsequent patent.' *Deering* vs. *Winona Harvester Works,* 155 U. S., 286.

"In any view, the Pettit machine being the first successful machine to accomplish a new result, the claims of the patent are clearly entitled to a broad and liberal construction and to the benefit of the doctrine of equivalents."

Applying the logic of that case to the case at bar, we think it follows conclusively that the "paper patent" of Turpin, which embodies an impracticable idea that never went into use, and was based on a wholly different principle from the Nielsen horn, can not operate to invalidate the Nielsen patent, which made known to the world for the first time a highly successful and practical metal horn which immediately superseded all prior horns and captured the entire market. The essential principle of the Nielsen invention is that metal can be retained as the material of the horn, thereby preserving the good qualities of metal as a material for horns, but by manufacturing the horns in the manner and form described in his patent, the defects long known to exist in metal horns are wholly obviated and a perfect metal horn is the result. This result had never been accomplished before.

If, therefore, it were a fact that all Neilsen did was to substitute metal strips for Turpin's wood and glass strips (a contention which we challenge, because Neilsen did more than that), nevertheless, he displayed invention, because his horn remedied the defects inherent in the metal horns of the prior art and constitutes a scientifically perfect and commercially successful device, a horn developing "new functions and useful properties," a horn which is "a superior product that has new capabilities and that performs new functions," a horn that was the first practical and successful metal horn on the market, developing "new properties," an "increase of efficiency," a "decided saving in operation," in fine "some new and useful result" (93 U. S., 496; 18 Wall., 670; *Walk. on Pat.* §29). The commercial history of the horn is an answer to the attack.

In determining the question of invention, in such cases the Court of Appeals of the Second Circuit, in *O'Rourke* vs. *McMullin,* 160 Fed., 938, says:

> "The principal question in such cases is: Has the patentee added anything of value to the sum of human knowledge, has he made the world's work easier, cheaper, and safer, would the return to the prior art be a retrogression? When the Court has answered this question, or these questions, in the affirmative, the effort should be to give the inventor the just reward of the contribution he has made. The effort should increase in proportion as the contribution is valuable. Where the Court has to deal with a device which has

achieved undisputed success and accomplishes a result never attained before, which is new, useful, and in large demand, it is generally safe to conclude that the man who made it is an inventor. The Court may resort to strict and, it may even be, to harsh construction when the patentee has done nothing more than make a trivial improvement upon a well known structure, which produces no new result; but it should be correspondingly liberal when convinced that the patentee's improvement is so radical as to put the old methods out of action. The courts have frequently held that one who takes an old machine and by a few, even inconsequential, changes compels it to perform a new function and to do important work which no one before dreamed it capable of performing, is entitled to rank as an inventor."

Respectfully submitted.

JOHN H. MILLER,

W. K. WHITE,

For Appellee.